Amendments to the Specification:

The Paragraph beginning at Page 3, lines 26-27, is to be amended as follows:

Figure 7 is a plan view of the underside of a base molding of the cartridge revealing a number of printing fluid conduits.

The Paragraph beginning at Page 7, lines 6-16, is to be amended as follows:

The purpose of the pressurized air is to prevent degradation of the printhead by keeping its nozzles free of dust and debris. The pressurized air is provided by an air compressor (item 122 of Figure ~~133~~3) incorporated into cradle 4. An air nozzle (item 124 of Figure ~~133~~3) of the compressor pierces air seal 44 upon insertion of cartridge 6 into cradle 4 and mates with air inlet port 76. An air coverplate 54 is fixed to the cartridge base molding and evenly distributes air across printhead 52 in the manner described above.

Power and data signals are provided to printhead 52 by means of busbar 56 which is in turn coupled to external data and power connectors 58A and 58B. An authentication device in the form of a quality assurance (QA) chip 57 is mounted to connector 58A. Upon inserting print cartridge 6 into cradle 4 the data and power connectors 58A and 58B, and QA chip 57, mate with corresponding connectors (items 84A, 84B of Figure 3) on cradle 4, thereby facilitating power and data communication between the cradle and the cartridge. QA chip 57 is tested in use by a portion of controller board 82 configured to act as a suitable verification circuit.

The Paragraph beginning at Page 8, lines 20-21, is to be amended as follows:

The ink jet printhead chip 52 (see Fig. 6) includes a silicon wafer substrate 8015. 0.35 Micron 1 P4M 12 volt CMOS microprocessing circuitry is positioned on the silicon wafer substrate 8015.

The Paragraph beginning at Page 12, lines 24-28 is to be amended as follows:

With reference to Figure 25, drive shaft 127 of motor 110 terminates in a worm gear 129 that meshes with a cog 125B that is, in turn, fixed to drive roller 96. Referring again to Figure 26, the drive roller is supported at either end by bearing mount assemblies 100A and 100B, which are in turn fixed into slots 101A and 101B of cradle mounting 80 (see also Fig.

30). Similarly, rotor element translation roller 94 and pinch roller 98 are also supported by bearing mount assemblies 100A and 100B.

The Paragraph beginning at Page 15, lines 10-12, is to be amended as follows:

Referring now to Figure 34, from the highest point of view a SoPEC device consists of 3 distinct subsystems: a Central Processing Unit (CPU) subsystem 301, a Dynamic Random Access Memory (DRAM) subsystem 302 and a Print Engine Pipeline (PEP) subsystem 303.

The Paragraph beginning at Page 22, lines 6-13, is to be amended as follows:

At the bottom of base molding 170 there extends a lug 190, which acts as a locating feature, shaped to mate with refill port of an inkjet printer component such as the ink refill port 8 of printer cartridge 6. The position of outlet pipe 182 and collar 172 relative to lug 190 is varied depending on the type of printing fluid which the ink refill cartridge is intended to contain. Accordingly, a printing fluid system is provided comprising a number of printing fluid dispensers each having an outlet positioned relative to lug 190 depending upon the type of printing fluid contained within the dispenser. As a result, upon mating the refill cartridge to port 8, outlet ~~192~~ 182 mates with the appropriate inlet 42A-42E and hence refills the particular storage reservoir 28, 30, 32, 34 dedicated to storing the same type of printing fluid.

The Paragraph beginning at Page 23, lines 3-8, is to be amended as follows:

As can be seen in Figure 27, the inner walls of recess 89 form a seat or shelf upon which cartridge 6 rests after insertion. A number of resilient members in the form of springs ~~190~~ 91 are provided to act against the cartridge as it is brought into position and also against the retainer catch, as it is locked over the cartridge. Consequently the springs act to absorb shocks during insertion and then to hold the cartridge fast with the cradle 4 and latch 7 ~~by securely~~by securely biasing the cartridge in place against the latch. In an alternative the springs might instead be located on latch 7 in which case cartridge 6 would be biased against cradle 4.

The Paragraph beginning at Page 23, lines 20-26, is to be amended as follows:

A remote computational device, such as a digital camera or personal computer, is connected to USB port 130 in order to provide power and print data signals to cradle 4. In

response to the provision of power, the processing circuitry of controller board 82 performs various initialization routines including: verifying the manufacturer codes stored in QA chip 57; checking the state of ink reservoirs 28 - 34 by means of the ink reservoir sensor ~~35~~(not shown); checking the state of rotor element 60 by means of sensor 156; checking by means of paper sensor 192 whether or not paper or other print media has been inserted into the cradle; and tricolor indicator LED 135 to externally indicate, via lightpipe 136, the status of the unit.

The Paragraph beginning at Page 24, lines 10-19, is to be amended as follows:

Subsequent to detecting a print command at USB port 130 and confirming the presence of print media, controller board 82 drives motor 110 so that drive roller 96 begins to rotate and, in cooperation with pinch roller 98, draws the print media past printhead 52. Simultaneously, controller board 82 processes print data from the external computational device in order to generate control signals for printhead 52. The control signals are applied to the printhead via cradle interfaces 84A, 84B, carriage interfaces 58A, 58B and flex PCB contacts at either end of printhead chip 52. Printhead chip 52 is bilithic, i.e. has two elongate chips that extend the length of the printhead, data is provided at either end of the printhead where it is transferred along the length of each chip to each individual nozzle. Power is provided to the individual nozzles of the printhead chips via the busbars that extend along the length of the chips. In response to received data and power, the individual nozzles of the printhead selectively eject ink onto the print media as it is drawn over the platen face of rotor element 60 thereby printing the image encoded in the data signal transmitted to USB port 130.

The Paragraph beginning at Page 24, lines 28-30, through to Page 25, line 1, is to be amended as follows:

Referring now to Figure 40, the first step of the ink refilling procedure is initiated by refill sensor ~~35~~ (not shown) indicating to controller board 82 that there is a deficiency of printing fluid in storage reservoirs 28, 30, 32, 34. In response to the signal from the ink cartridge QA chip that the ink is nearly depleted, controller board 82 activates indicator LED 138 to inform the user that another refill is necessary.

The Paragraph beginning at Page 26, lines 13-30, through to Page 27, lines 1-11, is to be amended as follows:

As shown in Fig. 41, when ink refill cartridge 160 is docked in refill port 8 of cartridge unit 6, ink outlet pin ~~28~~ 182 (see Fig. 39) penetrates sealing film 40 and one of apertures 42A-42E of the refill port to communicate with a corresponding one of ink inlets 24. Ink inlet 24 is provided as an elastomeric molding so that penetration of ink seal 32, which is located over ink refill cartridge outlet pin ~~28~~182, occurs automatically. As a consequence, self-sealing fluid communication is ensured between the ink stored in refill cartridge 160, ink delivery conduits 43A-43E and storage reservoirs 28-34. The self-sealing fluid communication results in a pressurised fluid flow of ink into one of reservoirs 28, 30, 32, 34 occurring upon outer molding 162 being depressed.

As shown in Figure 42, the third stage of the ink refilling procedure occurs when top cover molding 162 is depressed thereby expelling the ink present within the ink refill cartridge 160 into one of printer cartridge reservoirs 28-34. Following depressing of outer molding 162 it is apparent to an operator that the ink refill cartridge 160 has been spent and can therefore be removed from printer cartridge 6 as the refill stage is now complete. Upon completion of the refill stage refill sensor ~~35~~ (not shown) generates a signal indicating that the printing fluid level in each of reservoirs 28-34 is greater than a predetermined level. In response to the signal from the refill sensor, controller board 82 sets indicator LED 135 to shine green thereby indicating to the operator that the refill process has been successfully completed.

The force with which ink is expelled from ink refill cartridge 160 is determined by the degree of plunging force applied to the top cover molding 162 by an operator. Accordingly top cover molding 162 acts as an operation handle or plunger for the ink refill cartridge. Consequently it is possible that if the refilling step is not done carefully or done in haste, that the ink may be delivered to printer cartridge 6 at an unduly high pressure. Such a pressure could cause the ink stored within printer cartridge 6 to burst the ink storage membrane 26 and hence cause an ink spill within the cartridge unit that might irreparably damage the printer cartridge. The internal spring molding 164 prevents inadvertent bursting of the membrane by providing a safety mechanism against over pressurizing the ink being expelled from the refill unit. In this regard spring molding 164 is designed to limit the maximum force transmitted from the plunging of top cover molding ~~14~~ 162 to deformable ink membrane 26. Any force applied to top cover molding ~~14~~ 162 which would cause ink to be expelled at a pressure above a maximum allowable level is taken up by spring molding 164 and stored within the spring members 180. Spring molding 164 is suitably designed to prevent undue force being instantaneously applied to refill ink membrane 166. That is, its

deformation and/or elastic characteristics are selected so that it limits pressure in the membrane to a predetermined level.